New Records of Noctuidae (Lepidoptera) from the Korean Peninsula (II). Quadrifinae

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Abstract This list is based on the Noctuid materials of the collections of Agricultural Sciences Institute, Forest Research Institute, Center for Insect Systematics of Kangwon National University and Kyeongsang National University. A total of 24 species which belong to Noctuidae "Quadrifinae-group" are recorded from Korea for the first time. Among them, 12 species already known from Japan are reported for the first time from the continental Asia.

Key words Systematics, Fauna, Lepidoptera, Noctuidae, Quadrifinae, Korea

INTRODUCTION

This paper, dealing with the Noctuid fauna of the Korean Peninsula is the second contribution of our study. This part contains a total of 24 species, belonging to the so called "Quadrifinae group" (Euteliinae, Chloephorinae, Plusiinae, Catocalinae, Ophiderinae, Hypenodinae, Rivulinae, Hypeninae) which are reported for the first time from Korea. Among them, twelve species are firstly reported for the continental Asia. Two subfamilies (Acontiinae and Herminiinae) are not included in this paper. For our study we used the materials preserved in the same specimen-rooms that previous paper dealt (Ahn et al., 1994). The following abbreviations are used for the depositing places of collections: [ASI]-Agricultural Sciences Institute; [CIS]-Center for Insect Systematics; [FRI]-Forest Research Institute; [KSNU]-Kyeongsang National University. For the notes of distribution, we used abbreviation RFE which means Russian Far East region. Abbreviations of the provincial names for examined materials are given as GG-Gyunggi Prov.; GW-Gangwon Prov.; CN-Chungnam Prov.; CB-Chungbug Prov.; JN-Jeonnam Prov., JB-Jeonbug Prov.; GN-Gyungnam Prov.; GB-Gyungbug Prov.; CJ-Cheju Prov. For the distribution range in Korea, four divisional words were used: Northern-northern part of the Korean Peninsula (upper area of DMZ, DPRK area); Central-central part of the Korean Peninsula (including GG, GW, CB and CN of ROK); Southern-southern part of the Korean Peninsula (including JB, JN, GB and GN of ROK); Cheju-Cheju province.

A LIST OF NEWLY ADDED SPECIES FROM THE KOREAN PENINSULA

Subfamily Euteliinae 비행기밤나방亞科

Eutelia grabczewskii Püngeler 갈색점비행기밤나방 (Plate I-1)

Eutelia grabczewskii Püngeler, 1903, Deut. ent. Zeit. Iris 16: 289, pl. 6: 5.

Material examined. [ASI]-1 ↑, Mt. Naejangsan, JB, 11. VI. 1975 (J. -Y. Shim); 1 ♀, Mt. Pekunsan near Gwangyang, JN, 23. VI. 1991 (S. -B. Ahn); [CIS]-1 ↑, Gwangleung, GG, 8. VII. 1992; 1 ↑, Chuncheon, GW, 21. VII. 1992 (K. -T. Park & B. -K. Byun).

Distribution. Korea (Central, Southern), Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Note. Korean data is the first record for the continental Asia.

Subfamily Sarrothripinae 껍질밤나방亞科

Characoma ruficrra (Hampson) 상수리껍질밤나방 (Plate I-2)

Hypothripa ruficrra Hampson, 1905, Ann. Mag. nat. Hist., (7) 16: 540.

Material examined. [ASI]-1 \$, 1 \$, Cheonan, CN, 2. IX. 1984 (D. -H. Kim).

Distribution. Korea (Central), Japan (Honshu, Shikoku, Kyushu), Indonesia (Borneo), N. India.

Note. This specimen was emerged from the galls of Quercus sp. made by a Cynipid wasp, Tricha-galma serratae Ashmead (Cynipidae; Hymenoptera).

Subfamily Chloephorinae 푸른밤나방亞科

Earias erubescens Staudinger 연홍색푸른밤나방

Earias erubescens Staudinger, 1887, In Romanoff, Mem. Lepid. 3: 175.

Earias jezoensis Sugi, 1982, In Inoue, H. et al., Moths of Japan, I: 797, II: 378, pl. 194: 41, 42, pl. 371: 1.

Material examined. [CIS]-12 specimens, Mt. Dorimsan, Chuncheon, GW; Mokuje (Mt. Seolaksan), GW; Gwangyang, JN; Sogeumgang, GW.

Distribution. Korea (Central, Southern), Japan (Hokkaido, Honshu), RFE (from Amur basin to Primorye territory).

Note. The synonym cited was introduced from Sugi (1990), who compared the types of *E. erubescens* and *E. jezoensis* (Kononenko, 1990: 11, 30, No 219).

Earias roseoviridis Sugi 큰분홍무늬푸른밤나방 (Plate I-3)

Earias roseoviridis Sugi, 1982, In Inoue H. et al., Moths of Japan, I: 379, II: 797, pl. 194: 39, pl. 371: 3.

Material examined. [ASI]-1⁺, Mt. Odaesan, GW, 23. V. 1980 (K. -T. Park); 1⁺, Seomyon, Yangyang, GW, 24. V. 1987 (K. -T. Park); 1⁺, Chuncheon, GW, 1. V. 1989 (K. -T. Park); 3⁺, Seoguipo, CJ, 5. VII. 1986 (K. -T. Park).

Distribution. Korea (Central, Cheju), Japan (Amami-Oshima, Okinawa).

Note. Korean data is the first record of this species for the continental Asia.

Paracrama angulata Sugi 끝갈색푸른밤나방 (Plate I-4)

Paracrama angulata Sugi, 1985, Jap. Heteroc. J. 131: 90.

Material examined. [KSNU]-17, Geumgok (Jinyang), GN, 20. VI. 1982 (Y. -S. Liu).

Distribution. Korea (Southern), Japan (Honshu, Shikoku, Kyushu, Tsushima), Taiwan.

Note. This species was recorded as P. dulcissima Walker by Sugi (1982), but he corrected the scientific name as new one in 1985.

Subfamily Plusiinae 은무늬나방亞科

Abrostola abrostolina (Butler, 1879) 활무늬알락밤나방 (Plate I-5)

Inguridia abrostolina Butler, 1879, Ann. Mag. nat. Hist. (5) 4: 354.

Abrostola arensis Leech, 1889 (nec Guenee, 1882), Proc. zool. Soc. Lond. 1889: 535.

Abrostola tocionis Marumo, 1917, Colln Essay Mr. Y. Nawa 3: 29, text fig.

Material examined. [ASI]-1 \$\frac{1}{3}\$, Gwangleung 26-30. VII. 1991 (K. -T. Park); [CIS]-1 \$\frac{1}{3}\$, Gwangleung, GG, 17. V. 1988 (K. -T. Park); 3 \$\frac{1}{3}\$, Gwangleung, GG, 8. VII 1989 (K. -T. Park & B. -K. Byun).

Distribution. Korea (Central), Japan (Honshu, Shikoku, Kyushu, Tsushima), China, Taiwan.

Plusiopalpa adrasta (Felder et Rogenhofer) 아시아은무늬밤나방 (Plate I-6)

Plusiopalpa adrasta Felder et Rogenhofer, 1874, Reise ost. Fregatte Novara (Zool.) 2 (Abt. 2): pl. 110, fig. 35.

Material examined. [ASI]-1[♀], Mt. Seolaksan, GW, 9. IX. 1993 (S. -B. Ahn).

Distribution. Korea (Central), S. China, Vietnam, Indo-China, Indonesia (Borneo), India, SE Hymalaya.

Note. This species is distributed in the tropical regions of the old world. In Korea, this is probably a migrating species.

Subfamily Catocalinae 뒷날개밤나방亞科

Achaea janata (Linnaeus) 흰별수중다리밤나방 (Plate I-7)

Phalaena janata Linnaeus, 1758, Syst. Nat. (Ed. 10) 1: 527.

Noctua melicerta Drury, 1773, Illust. nat Hist. 1 (1770): 46, pl. 23: 1.

Noctua tigrina Fabricius, 1781, Spec. Ins. 2: 218.

Catocala traversii Fereday, 1877, Trans. N. Z. Inst. 9: 457.

Ophiusa ekeikei Beth. -Baker, 1906, Nov. Zool. 13: 256.

Material examined. [ASI]-1 $\stackrel{?}{+}$, Suwon, GG, 20. IX. 1958; 1 $\stackrel{?}{+}$, Cheju, CJ, 20. VI. 1975 (H. - S. Kim); 1 $\stackrel{?}{+}$, Seongpanak, CJ, 2, VIII. 1984 (K. -S. Lee).

Distribution. Korea (Central, Cheju), Japan (from Honshu to Okinawa), China, Taiwan, Indo-China, India, Philippines, New Guinea, Micronesia, Oceania, Australia.

Note. The species is widely distributed in the Indo-Australian region and SE Asia.

Subfamily Ophiderinae 짤름나방亞科

Lygephila craccae (Denis et Schiffermüller) 잿빛목검은밤나방 (Plate I-8)

Noctua craccae Denis et Schiffermüller, 1775, Ankun. Syst. Werk. Schmett. Wien. 1775: 94.

Material examined. [ASI]-1 \(\), Hongcheon, GW, 28. VI. 1989 (K. -S. Lee).

Distribution. Korea (Central), Japan (Hokkaido), RFE (from Amur region to Primorye and SaGhalin), Siberia, Central Asia, Europe.

Note. This is a widely distributed transpalaearctic species.

Lygephila subrecta Sugi 극동목검은밤나방 (Plate II-1)

Lygephila subrecta Sugi, 1982, In Inoue H. et al., Moths of Japan I: 857, II: 393, Pl. 210: 20, 21; 376: 1, 3.

Material examined. [ASI]-1\$, Hongcheon, GW, 20. V. 1988 (P. -K. Choi); 1\$, Suwon, GG, 23. VII. 1980 (C. -G. Yoo); 2\$, Suwon, 23, 26. VIII. 1976 (K. -B. Uhm); 1\$, Suwon, 22. VI. 1976 (K. -T. Park); 1\$, Suwon, 6. V. 1989 (S. -B. Ahn); [CIS]-3\$, 3\$, Suwon, 6. VI. 1989; 22. VI. 1976; 23, VII. 1980; 27. VI. 1976 (B. -K. Byun, K. -T. Park, C. -G. Yoo).

Distribution. Korea (Central), Japan (Hokkaido, Honshu).

Note. Korean data is the first record for the continental Asia.

Anomis longipennis Sugi 붉은잎밤나방 (Plate II-2)

Anomis longipennis Sugi, 1982, In Inoue H. et al., Moths of Japan I: 853, II: 393, pl. 211: 12-14, pl. 367: 10, 15, 19.

Material examined. [FRI]-5 \updownarrow , 3 \updownarrow , Gwangleung, GG, 6. XI. 1990 (G. -J. Weon); [KSNU]-1 \updownarrow , Namhae (Idongmyon., Sinjonri, Mt. Geumsan), GN, 28-29. VII. 1990 (D. -S. Ku).

Distribution. Korea (Central, Southern), Japan (Hokkaido, Honshu, Shikoku, Kyushu).

Note. Korean data is the first record for the continental Asia.

Daddala lucilla (Butler) 톱날무늬잎밤나방 (Plate II-3)

Sypna lucilla Butler, 1881, Trans. Ent. Soc. Lond. 1881: 206.

Material examined. [ASI]-1[♀], Namhae (Mt. Geumsan), GN, 24. VII. 1985 (K. -T. Park); 1[♀], Seongpanak, CJ, 2. VIII. 1984 (K. -S. Lee).

Distribution. Korea (Southern, Cheju), S. Japan (from Honshu to Okinawa and sothern island), China, RFE (S. Primorye, as a migrant), Taiwan, Burma, Borneo, Sumatra, Java, India, New Guinea.

Wilemaniella angulata (Wileman) 우묵날개짤름나방 (Plate II-4)

Rivula angulata Wileman, 1911, Trans. ent . Soc. Lond. 1911: 267.

Material examined. [ASI]-2[†], Mt. Yumyongsan, GG, 30. VII. 1990 (S. -H. Oh); 1[†], 1ex., Mt. Pekunsan near Gwangyang, JN, 25. VI. 1991 (S. -B. Ahn).

Distribution. Korea (Central, Southern), Japan (Honshu, Shikoku, Kvushu, Tsushima).

Note. Korean data is the first record for the continental Asia.

Paragabara secunda Remm 극동짤름나방 (Plate II-5)

Paragabara secunda Remm, 1983, Entomol. Obozr. 62: 596: 7.

Material examined. [CIS]-1⁺, Bongmyongri, Hongcheon, GW, 30. VI. 1992 (K. -T. Park). Distribution. Korea (Central), RFE (S. Primorye).

Microxyla confusa (Wileman) 세모짤름나방 (Plate II-6)

Rivula confusa Wileman, 1911, Trans. ent. Soc. Lond. 1911: 268.

Material examined. [ASI]- $2\uparrow$, Mt. Yumyongsan, GG, 30. VII. 1990 (S. -H. Oh); 1ex., Suwon, GG, 15. VII. 1976 (K. -T. Park); $1\updownarrow$, $1\updownarrow$, Mt. Pekunsan near Gwangyang, JN, 25. VI. 1991 (S. -B. Ahn); $1\updownarrow$, $1\updownarrow$, Cheju, CJ, 5. VII. 1986 (K. -T. Park).

Distribution. Korea (Central, Southern, Cheju), Japan (Honshu, Shikoku, Kyushu, Tsushima, Yakushima).

Note. Korean data is the first record for the continental Asia.

Prolophota trigonifera Hampson 두점깨다시짤름나방 (Plate II-7)

Prolophota trigonifera Hampson, 1896, Fauna Br. India (Moths) 4: 547, fig 284.

Material examined. [ASI]-1⁺, Chuncheon, GW, 24. VII. 1991 (S. -B. Ahn); [CIS]-1⁺, Mt. Seola-

ksan, GW, 10. VIII. 1992 (K. -T. Park & B. -K. Byun).

Distribution. Korea (Central), Japan (Honshu, Shikoku, Kyushu, southern islands), Sri Lanka.

Gonepatica butleri (Leech) 볼록짤름나방 (Plate II-8)

Camptochilus butleri Leech, 1900, Trans. ent. Soc. Lond. 1900: 647.

Material examined. [ASI]-1↑, Yangyang, GW, mid. V. 1987 (K. -T. Park); 1♀, Muju, JB, 12. VIII. 1975 (K. -T. Park); [CIS]-1 ex., Chuncheon, GW, 22. V. 1985 (K. -T. Park); 1 ex., Chuncheon, GW, 21. VII. 1992 (K. -T. Park & B. K. Byun); 1ex., Chuncheon dam, GW, 12. VIII. 1991 (K. -T. Park); 1 ex., Mt. Gyebangsan, GW, 2. VIII. 1989 (K. -T. Park); 2 exs., Yangyang, GW, 10. V. 1987 (K. -T. Park); 1 ex., Sogeumgang, GW, 23. V. 1988 (K. -T. Park).

Distribution. Korea (Central, Southern), Japan (Honshu, Shikoku, Kyushu, Tsushima, Yakushima). Note. Korean data is the first record from the continental Asia.

Anachrostis nigripunctalis (Wileman) 점무늬짤름나방 (Plate III-1)

Rivula nigripunctalis Wileman, 1911, Trans. ent. Soc. Lond. 1911: 268.

Material examined. [ASI]-5 ↑, 3 ♀, Suwon, GG, 2, 23, 28. VIII. 1974 (K. -T. Park); 2 ↑, Suwon, GG, 7. VI., 16. IX. 1976 (K. -T. Park); 1 ↑, Yangyang, GW, 26. VII. 1980 (K. -R. Choi); 1 ↑, Pyeongchang, GW, 24. VI. 1988 (S. -H. Oh); 1 ↑, Hongcheon, GW, 6. VII. 1987 (K. -S. Lee); 1 ♀, Suanbo, CB, 1. VII. 1990 (S. -H. Oh); 2 ↑, Mt. Gyeryongsan, CN, 20. VI. 1980 (K. -R. Choi); 2 ↑, Onyang, CN, 26. VI. 1990 (S. -H. Oh); 1 ↑, Mt. Jirisan, JB, 17. VII. 1976 (Y. -Y. Ha); 1 ↑, 1 ↑, Mt. Naejangsan, JB, 16. VI. 1992 (S. -B. Ahn); 1 ↑, Mt. Pekunsan (Gwangyang), JN, 25. VI. 1991 (S. -B. Ahn); 1 ↑, Mt. Mudeugsan, JN, 29. VI. 1990 (S. -H. Oh); [CIS]-27 exs., Bongmyongri, Hongcheon, GW; Mt. Palbongsan, GW; Chuncheondam, GW; Honcheon, GW; Soyang dam, GW; Chuncheon, GW; Topyong, CJ; Gwaneumsa, CJ, 9. VI. -31. VIII. 1986-1992 (K. -T. Park and B. -K. Byun, S. -G. Lee).

Distribution. Korea (Central, Southern), Japan (from Hokkaido to Kyushu).

Note. Korean data is the first record for the continental Asia.

Anachrostis minutissima Sugi 작은점무늬짤름나방 (Plate III-2)

Anachrostis minutissima Sugi, 1982, In Inoue H. et al., Moths of Japan. 1: 890, 2: 402, pls. 219: 40, 41, 38: 3, 4.

Material examined. [CIS]-11 exs., Mt. Soyosan, GG; Mt Seolaksan, GW; Mt. Odaesan, GW; Mt. Gyebangsan, GW; Mt. Samaksan, GW; Chuncheon, GW; Gotan, GW; Hongcheon, GW, 6. VIII. - 25. IX; 3. XI, 1987-1992 (K. -T. Park, B. -K. Byun).

Distribution. Korea (Central), Japan (Yakushima, Nishi-Oshima Isls).

Note. This smallest moth has been known only from the small islands of southern part of Japan. Korean data is the first report for the continental Asia

Subfamily Hypenodinae 꼬마짤름나방亞科

Hypenodes rectifascia Sugi 흰줄꼬마짤름나방 (Plate III-3)

Hypenodes rectifascia Sugi, 1982, In Inoue H. et al., Moths of Japan I: 899, II: 403, pl. 220: 21, pl. 379: 11, pl. 380: 12.

Material examined. [ASI]-1 $^{\circ}$, Suwon, GG, 20. V. 1976 (K. -T. Park); 1° , Suwon, GG, 23. VII. 1975(K. -T. Park); 2° , Suwon, GG, 10. VIII. 1975, 30. VIII. 1976 (K. -T. Park); 5° , 3° , Suwon, GG, 13. IX. 1975 (K. -T. Park); 1° , Gwangleung, GG, 10. VII. 1982 (K. -T. Park); 1° ,

Mt. Yumyongsan, GG, 30. VII. 1990 (S. -H. Oh); [CIS]-1 \$, Mt. Soyosan, GG, 3. XI. 1992 (K. -T. Park); 1 \$, Gwangleung, GG, 27. VII. 1988 (K. -T. Park); 1 \$, Chuncheon, GW, 10. VII. 1989 (K. -T. Park).

Distribution. Korea (Central), Japan (Honshu, Kyushu).

Note. Korean data is the first record for the continental Asia.

Schrankia kogii Inoue 둥근점꼬마짤름나방 (Plate III-4)

Schrankia kogii Inoue, 1979, Tinea 10: 304, fig. 5, 11.

Material examined. [ASI]-1 $\stackrel{\circ}{+}$, Yongin, GG, 28. V. 1989 (K. -S. Lee); 1 $\stackrel{\circ}{+}$, Suwon, GG, 16. IX. 1976 (K. -T. Park); 1 $\stackrel{\circ}{+}$, 1 $\stackrel{\circ}{+}$, Suwon, GG, 10. IX. 1974 (Y. -I. Lee); 2 $\stackrel{\circ}{+}$, Gwangleung, GG, 10. VII. 1982 (K. -T. Park); [CIS]-1 $\stackrel{\circ}{+}$, Chuncheon, GW, 9. IX. 1988(K. -T. Park) and further specimens from Mt. Yumyongsan, GG.

Distribution. Korea (Central), Japan (Hokkaido, Honshu).

Note. Korean data is the first record for the continental Asia.

Schrankia masuii Inoue 연갈색꼬마짤름나방 (Plate III-5)

Schrankia masuii Inoue, 1979, Tinea 10: 303, figs 1, 9.

Material examined. [ASI]-1 \updownarrow , Suwon, GG, 19. VI. 1985 (J. -O. Lee); $4 \updownarrow$, $1 \dotplus$, Suwon, GG, 18. V. 1977, 11. VI. 1974, 11. VI., 18. IX. 1974, 1976 (K. -T. Park); $1 \dotplus$, Suwon, GG, 18. VII. 1982 (D. -J. Im); $1 \updownarrow$, Mt. Weolaksan, CB, 20. VI. 1984 (S. -B. Ahn).

Distribution. Korea (Central), Japan (Honshu, Shikoku, Kyushu).

Note. The Korean data is the first report for the continental Asia.

Schrankia costaestrigalis (Stephens) 검은줄꼬마짤름나방 (Plate III-6)

Cledeobia costaestrigalis Stephens, 1843, Ill. Br. Ent. (Haustellata) 4: 21.

Material examined. [CIS]-1 &, Mt. Samaksan, 21. XI 1989 (K. -T. Park); [ASI]-9 exs., Mt. Myong-jisan, GG; Isl. Seonban, GG; Mt. Gyebangsan, GW; Mt. Soyosan, GG; Chuncheon, GW; Gwangyang, JN; Cheju N. Univ., 17-18. V; 4. IV; 8-28. VII; 24. VIII; 3. IX; 21. IX. 10, 1989-92 (K. -T. Park, B. -K. Byun, S. -H. Oh & H. -Y. Choi).

Distribution. Korea (Central, Southern, Cheju), Japan (from Honshu to Okinawa), RFE (Primorye), SE Asia region, Middle East, Central and South Europe, Austraila.

Subfamily Rivulinae 노랑짤름나방亞科

Rivula unctalis Staudinger 끝갈색노랑짤름나방

Rivula unctalis Staudinger, 1892, In Romanoff, Mem. Lepid. 6: 631.

Material examined. [CIS]-26 exs., Mt. Myongjisan, GG; Chuncheon, GW; Bongmyongri, Hong-cheon, GW; Mt. Myongjisan, GW; Gwangleung, GG; Mt. Daedunsan, CN; Cheju Nat. Univ., CJ; 16. V.-3. VI; 8. VII.-2. IX. 1988-1992 (K. -T. Park, B. -K. Byun, G. -J. Weon).

Distribution. Korea (Central, Cheju), Japan (Hokkaido), RFE (from Amur Basin to Primorye).

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한국産 밤나방科(나비目)의 未記錄鍾 (II). Quadrifinae

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검색어:분류, 나비목, 밤나방, 미기록종, Quadrifinae, 분포, 한국

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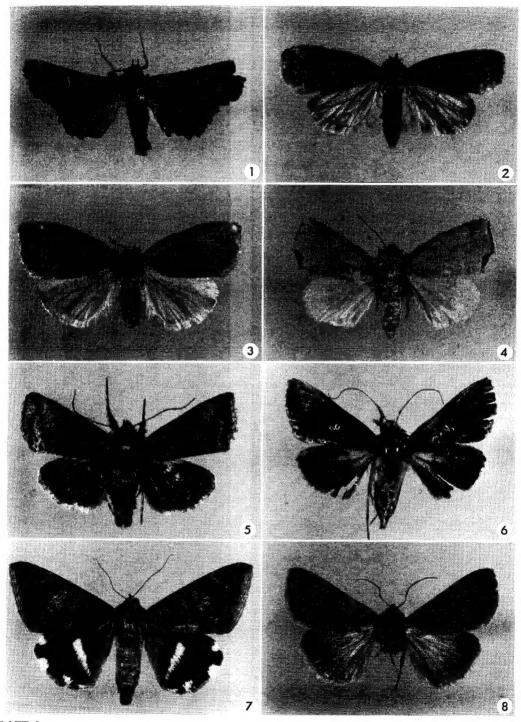


PLATE I

- 1. Eutelia grabczewskii Püngeler
- 2. Characoma ruficrra (Hampson)
- 3. Earias roseoviridis Sugi
- 4. Paracrama angulata Sugi

- 5. Abrostola abrostolina (Butler)
- 6. Plusiopalpa adrasta (Felder et Rogenhofer)
- 7. Achea janata (Linnaeus)
- 8. Lygephila craccae (Denis et Schiffermüller)

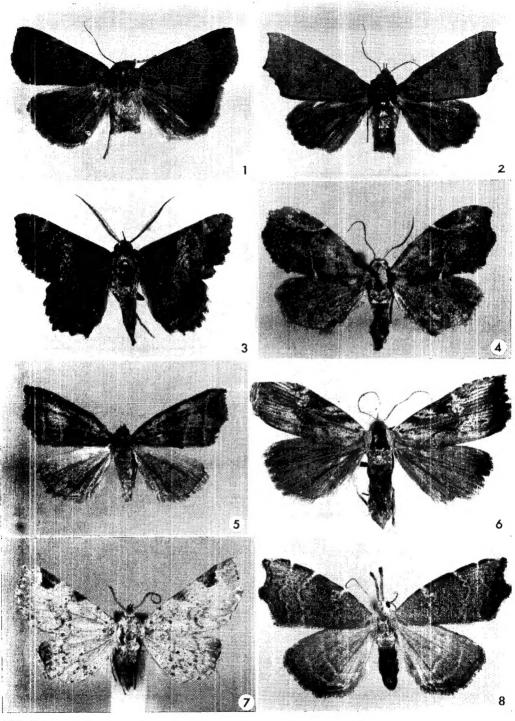


PLATE II

- 1. Lygephila subrecta Sugi
- 2. Anomis longipennis Sugi
- 3. Daddala lucilla (Butler)
- 4. Wilemaniella angulata (Wileman)

- 5. Paragabara secunda Remm
- 6. Mycroxyla confusa (Wileman)
- 7. Prolophota trigonifera Hampson
- 8. Gonepatica butleri (Leech)

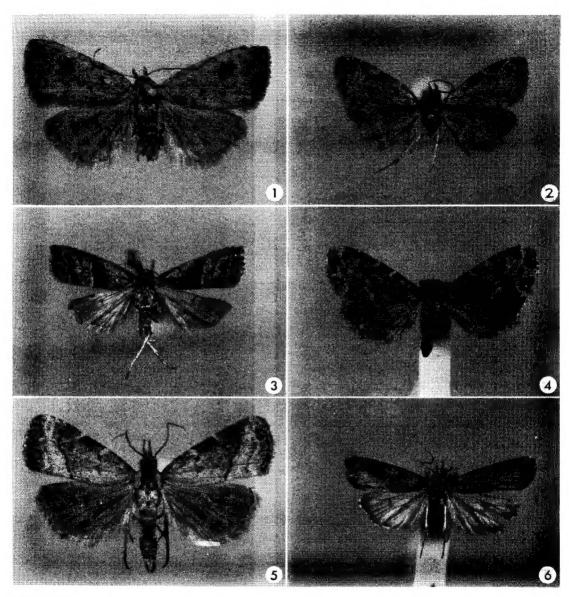


PLATE III

- 1. Anachrostis nigripunctalis (Wileman)
- 2. Anachrostis minutissima Sugi
- 3. Hypenodes rectifascia Sugi

- 4. Schrankia kogii Inoue
- 5. Schrankia masuii Inoue
- 6. Schrankia costaestrigalis (Stephens)